



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,206	03/02/2004	Tokuo Yokota	040095	1030

23850 7590 05/04/2007  
ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP  
1725 K STREET, NW  
SUITE 1000  
WASHINGTON, DC 20006

EXAMINER
----------

DISTEFANO, GREGORY A

ART UNIT	PAPER NUMBER
----------	--------------

2109

MAIL DATE	DELIVERY MODE
-----------	---------------

05/04/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/790,206	YOKOTA ET AL.
	Examiner Gregory A. DiStefano	Art Unit 2109

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.

- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.

- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 02 March 2004.

2a) This action is FINAL.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-4 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-4 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 02 March 2004 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>3/2/2004</u>	6) <input type="checkbox"/> Other: _____

**DETAILED ACTION**

1. This action is in response to the application filed on 3/2/2004.
2. Claims 1-4 have been submitted for examination.
3. The examiner acknowledges and accepts applicant's claim to foreign priority under 35 U.S.C. 119 for Japanese application number 2003-059282, filed on 3/6/2003.

***Specification***

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
5. The following title is suggested: "Button functionality of a signal reproducing apparatus".

***Claim Objections***

6. Claims 1 is objected to because of the following informalities:  
Regarding claim 1, lines 6, 9, and 15, and claim 3, lines 6 and 10, applicant ends and separates each limitation with a comma (","). Proper punctuation for this would be a semicolon (";").

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Chen (US 5,724,069).

9. As per claim 1, Chen teaches the following:

one or more manipulation buttons (Fig. 1, #40), (column 5, lines 14-16), i.e. the input module 25 (Fig. 3) comprises a plurality of pushbuttons 40 mounted on a bezel 41 surrounding the screen 30;

storing means (e.g. memory) for storing a plurality of pieces of function information indicating a function to be performed when the one or more manipulation buttons are manipulated, (column 3, lines 7-11), i.e. a program memory in the microcomputer contains instructions which (a) assign specific input functions to the pushbuttons, and (b) display pushbutton function assignments on the display screen in positions coordinated to the positions of the pushbuttons;

function specifying means (Fig. 3 #60) for, with the recording medium placed therein, specifying function information in conformity with function-specifying information (Fig. 5, # 75) included in management information recorded on the recording medium

from among a plurality of pieces of the function information stored in the storing means with respect to each manipulation button, (column 6, lines 57 – column 7 line 5), i.e. the first module is the I/O module 60 which is responsible for controlling the course of the computer-user interaction. The course of interaction may be viewed as comprising many levels, and at each level the user is required to make one choice. The operation of the program correspondingly has many levels. At each level the I/O module 60 performs the output function of presenting to the user a set of functions for the user to choose from, and the input function of receiving a keystroke signal from the user indicating which function has been selected. The functions presented to the user are level-specific, meaning that which functions are presented depends on the level of operation. The I/O module 60 also assigns the level specific functions to the pushbuttons 40 so that the user can press one button to select its assigned function; means for activating an operation (Fig. 3, #66) in conformity with the specified function information with respect to one of the one or more manipulation buttons when said manipulation button is manipulated with the recording medium placed therein, (column 7, lines 6-8), i.e. the second module in the application program is the application module 66. This module is responsible for carrying out the functions selected by the user.

10. Regarding claim 2, Chen teaches the system of claim 1 as described above. Chen further teaches the following:

The function-specifying information comprises a plurality of parameters (e.g. level

specific), and the function specifying means specifies function information based on the plurality of parameters, (column 6, line 67 – column 7, line 2), i.e. The functions presented to the user are level-specific, meaning that which functions are presented depends on the level of operation.

11. Regarding claim 3, Chen teaches the system of claim 1 as described above. Chen further teaches the following:

parameter storing means (e.g. location in hierarchical tree) for storing the operational parameter, (column 7, lines 41-44), i.e. the instructions in the application memory of the microcomputer can be programmed to present to a user functions organized in a hierarchical menu tree fashion;

storage processing means for storing, in the storing means, the operational parameter (e.g. current location in the hierarchical tree) included in the management information recorded on the recording medium with the recording medium placed therein, (column 7, lines 44-50), i.e. at a given time the program displays on the screen selection indicators for options on one level of the menu tree. After the user selects an option by pressing a button, the program responds by presenting new functions on the next level of the menu tree to the user. Which new options are presented depends on which option has been selected;

the means for activating operation activates an operation for rewriting (e.g. change assignment) the operational parameter stored in the storing means when one manipulation button is manipulated, and the program activates a predetermined

operation in accordance with a value of the operational parameter stored in the storing means, column 5, line 66 – column 6, line 3), i.e. in combination with the array of pushbuttons around the display, means for assigning particular functions to the pushbuttons, and changing the assignment of functions at different levels of the application program. The examiner interprets Chen's teachings to encompass applicant's claim by Chen's application storing the program's functions and those functions' relationships to each other. Chen's system further tracks the user's current level within the hierarchical tree of functions, as well as replacing (rewriting) the current level with a lower level based on the user's selection.

12. Regarding claim 4, Chen teaches the system of claim 1 as described above.

Chen further teaches the following:

the reproducing apparatus comprises an information display (Fig. 1, #30) and display controlling means for showing on the information display a function indicated by function information when the function information is specified by the function specifying means, (column 6, lines 63-65), i.e. at each level the I/O module 60 performs the output function of presenting to the user a set of functions for the user to choose from.

### ***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Anderson (US 6,154,210), Method and system for implementing button interface compatibility in touch-screen equipped digital imaging device.

Sim (US 6,213,880), Game pad apparatus and method for navigation on a digital video disk (DVD) system.

Anderson (US 6,486,914), Method and system for controlling user interaction in a digital imaging device using dynamic overlay bars.

Horie et al.(US 2003/0122698), Controller apparatus for controlling an electronic apparatus.

“Multi-function control module”, Research Disclosure number 317064, disclosed anonymously, published in September 1990 by Kenneth Mason Publications Ltd.

Terahama et al. (JP 07225666 A), Function button setting method.

Yokogawa (JP 11308490 A), Photographic mode switching apparatus for electronic camera – includes zoom scale factor selection unit that selects zoom scale factor when zoom mode is chosen by mode switching unit.

Setogawa et. al. (JP 10283155 A), Menu screen for DVD player – has operation buttons for indication which are perpendicularly arranged on single tier when operation button functioning as selected object is move to right and left by remote control unit.

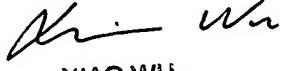
Kuhn et al. (DE 19959702 A1), Display and control unit, has multi-function button with touch feedback of triggering of current button function and whereby functions to be triggered can be distinguished by touch.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory A. DiStefano whose telephone number is (571)270-1644. The examiner can normally be reached on 7:30am-5:00pm Mon.-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xiao Wu can be reached on (571)272-7761. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

G.A.D.  
4/24/2007

  
XIAO WU  
SUPERVISORY PATENT EXAMINER